IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of: U.S. Patent No. 6,493,419

Serial No.:

09/884,229

Filed:

June 19, 2001

Issued:

December 10, 2002

Inventor:

Mark Dinsmore

Title:

OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE HAVING

A SPIRAL-SHAPED THERMIONIC CATHODE

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail under 37 CFR 1.8(a) in an envelope addressed to Mail Stop REISSUE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Date: 3/1/04

Gayle Endres

Mail Stop REISSUE

Assistant Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

COMBINED DECLARATION AND POWER OF ATTORNEY IN REISSUE APPLICATION

Sir:

- I, Mark Dinsmore, declare that:
- 1. My residence address is 85 Horse Pond Road, Sudbury, MA.
- 2. I am a citizen of the United States of America.
- 3. I believe I am the original, first and sole inventor of the subject matter that is described and claimed in United States Patent Number 6,493,419 (hereinafter "the '419 patent"), granted on December 10, 2002, and for which I solicit a reissue patent.

- 4. I have read and understand the contents of the attached reissue application, including the specification and claims.
- 5. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.
- I believe the '419 patent, which matured from application Serial No. 09/884,229, 6. filed on June 19, 2001, to be wholly or partly inoperative or invalid by reason of my claiming less than I had a right to claim in the patent. The error includes not having claimed a probe having a radiation source at a distal end, and including: a) a probe assembly including an optical delivery structure adapted for transmitting optical radiation; b) an optical source for generating optical radiation directed to an end of said optical delivery structure; c) a radiation source coupled to a distal end of said optical delivery structure, said radiation source comprising a thermionic cathode and a target element; i) wherein the thermionic cathode is responsive to said optical radiation transmitted to said distal end to emit electrons, and wherein said thermionic cathode comprises a spiral-shaped conductive element; and ii) wherein said target element is responsive to incident electrons emitted from said thermionic cathode to emit radiation; d) means for establishing an accelerating electric field extending between said electron source toward said target element, the electric field being effective to accelerate electrons emitted from the thermionic cathode toward said target element; wherein said optical delivery structure is adapted to direct a beam of optical radiation transmitted therethrough to impinge upon a surface of the thermionic cathode, and wherein said beam of transmitted optical radiation has a power level sufficient to heat at least a portion of said surface to an electron emitting temperature so as to cause thermionic emission of electrons from said surface.

- 7. All errors being corrected in the reissue application, up to the time of filing this declaration, arose without any deceptive intent.
- 8. I appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Mark G. Lappin, Registration No. 26,618

Toby H. Kusmer, Registration No. 26,418

Elizabeth E. Kim, Registration No. 43,334

David M. Mello, Registration No. 43,799

Jeffrey J. Miller, Registration No. 39,773

Brian Colandreo, Registration No. 42,427

Jeffrey Barclay, Registration No. 48,950

SEND CORRESPONDENCE TO:

DIRECT TELEPHONE CALLS TO:

Mark G. Lappin McDermott, Will & Emery 28 State Street Boston, MA 02109 Mark G. Lappin (617-535-4043)

10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date	

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In re Reissue	e Application of: U.S.	Patent No	o. 6,493,419
Serial No.:	09/884,229		
Filed:	June 19, 2001		
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Inventor:	Mark Dinsmore		
Title:	OPTICALLY DR	IVEN TH	ERAPEUTIC RADIATION SOURCE
	HAVING A SPIR	AL-SHAF	PED THERMIONIC CATHODE
	<u>CER</u>	TIFICATE OI	F MAILING (37 C.F.R. § 1.8(a))
I hereby certify that	at this correspondence is being depressed to Mail Stop BEISSLIE Co	oosited with the	United States Postal Service as First Class Mail under 37 CFR 1.8(a) Patents, P.O. Box 1450, Alexandria, A 22313-1450 on the date indicated below
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Date: 3/	1109		Gayle Endres Gayle Endres
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-	ner for Patents		
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Alexandria,	VA 22313-1450		
	ASSE	NT OF AS	SSIGNEE TO REISSUE
Sir:			
Germany, w the entire in reissue pater right of the a	ith a post address Car terest in the above-ment application. Attacheassignee, Carl-Zeiss-S	l Zeiss Strationed Lead is a "State of the state of the s	g, doing business as Carl Zeiss, a legal person of rass 22, 73447 Oberkochen, Germany, assignee of etters Patent, hereby assents to the accompanying atement Under 37 CFR 3.73(b)," establishing the loing business as Carl Zeiss, to take action in this powered to sign this certificate on behalf of the
			Respectfully submitted,
			CARL-ZEISS-STIFTUNG,
			doing business as CARL ZEISS
Date:		By:	
		Duinta	1 Nama:
		rnnec	l Name:
		Title:	

BST99 1383667-1.056249.0101

Statement Under 37 CFR 3.73(b)

Applicant/Patent Owner:		Mark Dinsmore / Carl Zeiss					
Application No./Patent No.: Entitled:			09/884,229/6,493,419 Filed/Issue Date: 06/19/01/12/10/02 OPTICALLY DRIVEN THERAPEUTIC RADIATION SOURCE HAVING A SPIRAL-SHAPED THERMIONIC CATHODE				
Carl	-Zeiss-Sti	ftung, doin	ng business as (Carl Zeiss, a legal person of Germany			
	(Name o	of Assignee)		(Type of Assignee)			
certifi of eith		the assignee	of the entire right	t, title and interest in the patent application identified above by virtue			
A.	[X]	An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.					
OR							
B.	[]	A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:					
1.	From:			To:			
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	[] Ad	lditional docu	ments in the chair	in of title are listed on at.			
	[] Co ₁	pies of assign	ments or other do	ocuments in the chain of title are attached.			
above				documents in the chain of title of the patent application identified edge and belief, title is in the assignee identified above.			
assigi		dersigned (wh	nose title is suppli	lied below) is empowered to sign this certificate on behalf of the			

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: _				 	
Name: _				 	
Telephone	Number: _		· · · · · ·	 	
Signature:				 	